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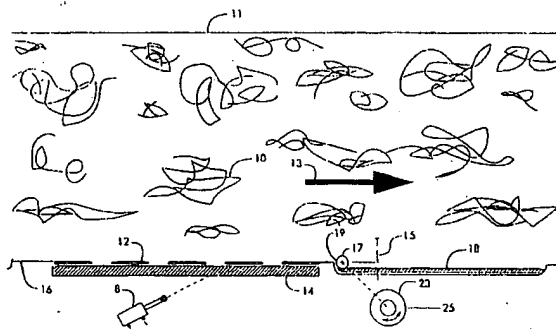
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BE CH DE ES FR GB IT LI PT(96) Date of deferred publication of the search report:
18.01.95 Bulletin 95/03(71) Applicant: **ZELLWEGER USTER, INC.**
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CH-8610 Uster (CH)(54) **Continuous two dimensional monitoring of thin webs of textile materials.**

(57) An apparatus monitors a web of textile material which is also processed by a textile processing machine. The web is in motion relative to an imaging unit, and the imaging unit repetitively scans at least one strip across the web in a direction substantially perpendicular to the direction of relative motion of the web. A computer receives signals from the imaging unit and produces digital data corresponding thereto. The computer further analyzes the digital data to find entities of interest in the web and determines parameters of the found entities of interest. Preferably, the imaging unit and computer include

distinguishing means for producing a plurality of optical images of the same portion of the web where each of the optical images are distinguished one from the others by the spectral content. In addition, the imaging unit and computer produce a plurality of time separated images, where each of the time separated images are produced during different lighting conditions on the web. In one embodiment, one image is produced while the front side of the web is illuminated, and another image is produced on the same portion of the web while the rear side of the web is illuminated.

Fig. 1

**EP 0 604 875 A3**



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EUROPEAN SEARCH REPORT

Application Number

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	EP 93120586.8 CLASSIFICATION OF THE APPLICATION (Int. CL.5)
A	<u>DE - A - 3 819 183</u> (E. SICK) * Abstract; claims; fig. 1,2 * --	1,8	G 01 N 21/89
A	<u>GB - A - 2 239 946</u> (HAJIME INDUSTRIES) * Abstract; page 1, lines 4-18; page 2, line 11 page 3, line 25; claims; fig. 1,2 * --	1,18	
X	<u>GB - A - 2 236 389</u> (TRÜTZSCHLER GMBH) * Totality *	1,10, 11,12, 13,14, 15,16, 18,19, 20	
A	<u>GB - A - 1 411 254</u> (MOHAMED AHMED HASSAN) * Totality *	1	TECHNICAL FIELDS SEARCHED (Int. CL.5)
A	<u>US - A - 4 170 419</u> (R.G. VAN TYNE) * Abstract; column 2, line 14 - column 4, line 14; claims; fig. 1,22,23 * --	1,8,18	G 01 N 21/00
A	<u>US - A - 4 124 300</u> (D.C. MEAD) * Totality *	1	
A	<u>EP - A - 0 331 039</u> (GEBRÜDER LOEPFE AG) * Totality * ----	1	
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 11-11-1994	Examiner ERBER
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			